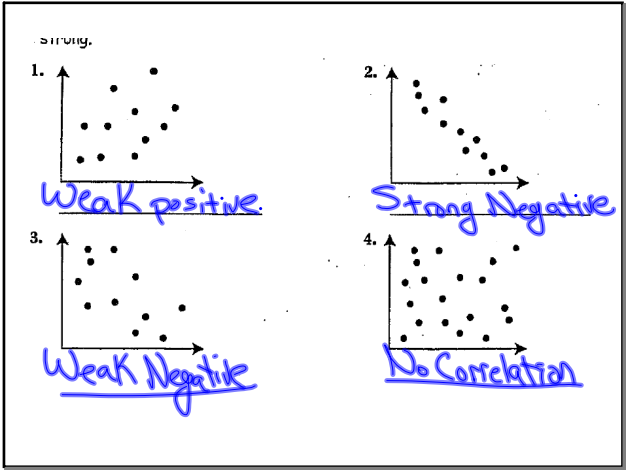


Sep 26-11:51 AM

Definition: A scatter plot is A relationship between two variables.

Sep 26-11:58 AM



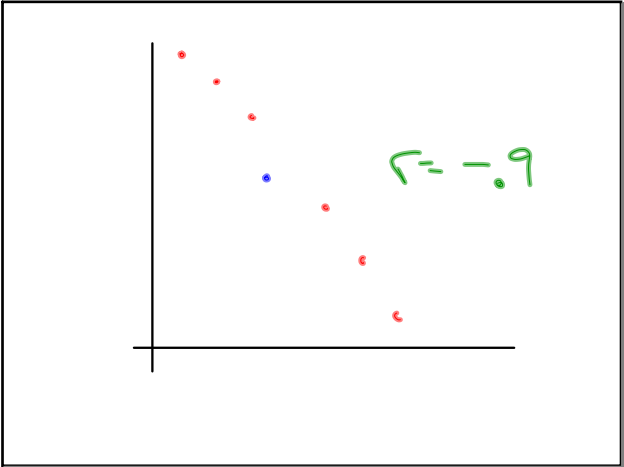
Sep 26-11:59 AM

If the relationship between two sets of data is linear, it is possible to find a line that "best fits" the data called a "best-fit" or Line of Best Fit. This line is based on minimizing the vertical distances for the data set.

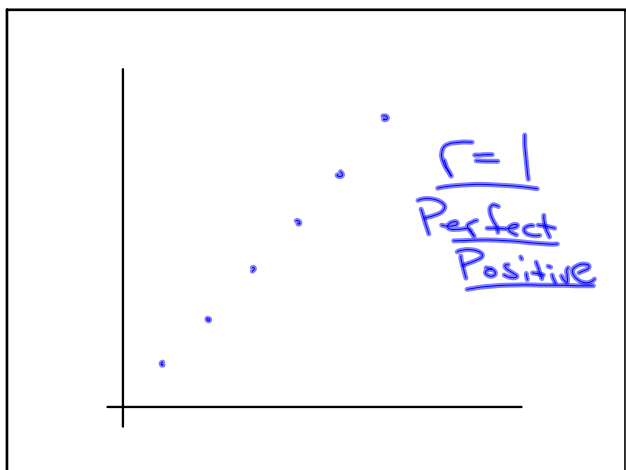
Sep 26-12:02 PM

A number used to describe how closely the points in the scatter plot cluster around a "least-squares" line is called the Correlation Coefficient and is denoted by "r".

Sep 26-12:03 PM



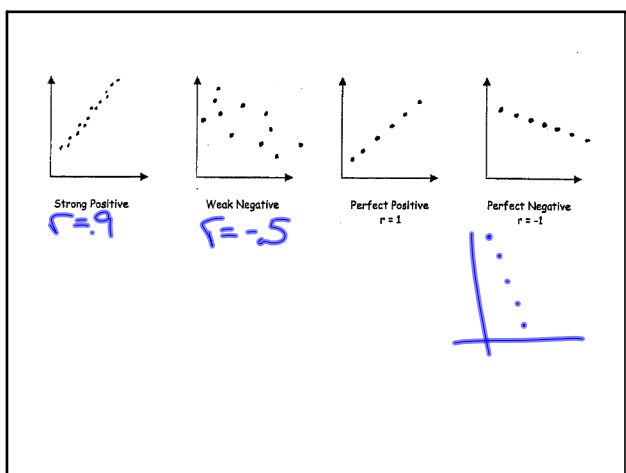
Sep 26-12:04 PM



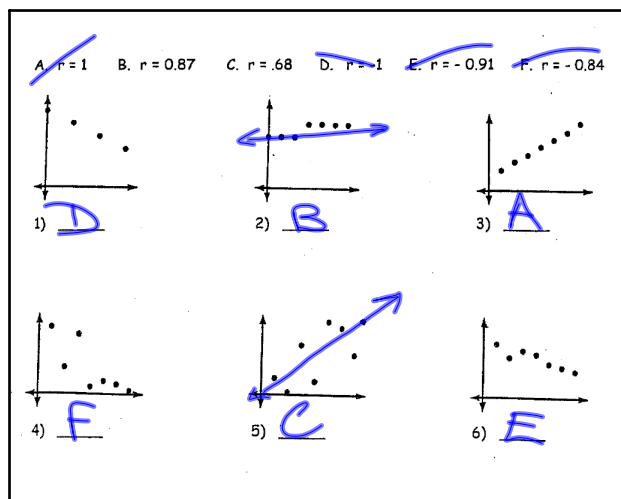
Sep 26-12:05 PM

$$-1 \leq r \leq 1$$

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Sep 26-12:08 PM

$(10, 2100)$
 $(13, 2400)$
 $m = \frac{2400 - 2100}{13 - 10} = \frac{300}{3} = 100$
 $y - y_1 = m(x - x_1)$
 $y - 2100 = 100(x - 10)$
 $y - 2100 = 100x - 1000$
 $y = 100x + 1100$

2010 $x=30$
 $y = 100(30) + 1100$
 $y = 3000 + 1100$
 $y = 4100$

HW
1.5
Scatter plot
1, 2, 3

Sep 26-12:26 PM